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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,325	08/05/2003	Lev Fedoseyev		7858

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ROTYS INC.
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San Diego, CA 92123

EXAMINER

EDGAR, RICHARD A

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/634,325	Applicant(s) FEDOSEYEV ET AL.	
	Examiner Richard Edgar	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 9, 11, 12, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8, 10, 13-15 and 18-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the magnetic insulation between the stator and heatsink (claim 12) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14" has been used to designate both rotor and stator (Figs. 1A and 1B). The examiner suggests changing the numeral "14" with the arrowhead in Figures 1A and 1B to numeral "13" to be commensurate with the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of

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the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (§ [0011]). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Objections

Claims 6, 13 and 16 are objected to because of the following informalities:

Claim 6 should depend from claim 5, which first recites the blades being magnetized.

In claim 13, "said magnetic shroud" should be -- a magnetic shroud --.

In claim 16, "said side part" should be -- a side part --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 16 recites the broad

recitation "several", and the claim also recites "at least three" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 9, 11-12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Laid-open JP 8-195456 (the Japanese reference hereinafter) in view of United States Patent No. 5,995,367 (Smith et al. hereinafter).

The Japanese reference teaches an integrated blade cooler for electronic components comprising a blower 20, an electric drive 23 and a heatsink 10 wherein: the blower comprises a radial impeller 22 and a casing 21 with an inlet 21a and an outlet 22c; said radial impeller comprises blades, a backplate disk 22b and an axis of rotation; said heatsink 10 comprises heat-exchanging means 12 clothed in a cover plate 21 with an outflow opening 21a and a base 11a providing thermal contact with the electronic component M and the heat exchanging means 12; said outflow opening 21a of the cover plate being coincided with the inlet of the blower, thus cooling gas W flows through the heat-exchanging means 12, said blower inlet 21a, said radial impeller 22 and said blower outlet 22c in a series way. The heatsink is shown as pins (Fig. 2) or fins (Fig. 3).

The Japanese reference shows an electric motor 23 and not magnetic means for rotating the impeller.

Smith et al. show an integrated blade cooler for electronic components comprising a blower 14, an electric drive 80 and a heatsink 22, wherein the blower comprises a radial impeller and a casing 12 with an inlet 18 and an outlet 86e; the radial impeller comprises blades 20, a backplate disk and an axis of rotation; the electric drive comprises a magnetic motor and a stator 84 made as a part of the casing, the radial impeller comprises magnetic means 70 serving as a magnetic rotor of the electric drive; the heatsink comprises heat-exchanging means (see Fig. 4) clothed in a cover plate 76. The stator 84 is made on a circuit board 82. Magnetic insulation 78 is provided between the stator 84 and the heatsink 22. The Smith et al. reference uses planar motor technology for the purpose of minimizing the motor space (see col. 6, lines 8-18).

Since the Japanese reference teaches the removal of heat from a heatsink by introducing a flow of cooling air through the heat radiating elements and through the centrifugal fan, and the Smith et al. reference also teaches a centrifugal fan used to cool a heatsink, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the impeller moving means to be a magnetic means, as taught by Smith et al., for the purpose of minimizing the motor space.

Allowable Subject Matter

Claims 5, 6, 8, 10, 13-15 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, neither of the references teaches magnetizing the blades. The magnet of Smith et al. is shown embedded in the disk.

Claims 6, 8 and 13 require a blade shroud to be magnetized. While Smith et al. teach a shroud, one having ordinary skill in the art at the time the invention was made would not have been motivated to magnetize the shroud, especially since there are no corresponding stator elements near the shroud.

While Smith et al. show the circuit board 82 with stator elements 84 on the same side of the impeller as the heat sink 22, one would not be motivated to put a circuit board with stator elements on the opposite side of the impeller as required in claims 10 and 14, since the Smith et al. magnet 70 is only taught as being embedded in the impeller disk, which is located adjacent the heatsink.

The Japanese reference shows one outlet for exhausting high energy air, but no second, oppositely located outlet, as is recited in claim 15.

No pillars are shown in either of the cited references, therefore claim 16 includes limitations not found directly or inherently in any of the references, either alone or in combination with each other.

Finally, regarding claims 18-20, one having ordinary skill in the art would not be motivated to modify the heat sink of either of the references so that there is a recess and that the blower is located in the recess, since each of the disclosed heatsinks have a similar "footprint" as the bottom of the respective blower housing, so no such recess is possible.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Monday thru Friday, 8:00 am until 4:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar
Examiner
Art Unit 3745

RE



EDWARD K. LOOK
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12/20/04